

**PRIORITY****SECRET**

OUT 62848

1967 AUG 11 23 13Z

P 112217Z AUG 67

FM NPIC

TO RUCSAA/SAC OFFUTT AFB OMAHA NEB

RUCVAA/4080 STRAT WG OL 19 BARKSDALE AFB LA

RUCVAA/NAVRECONTECHSUPPCEN BARKSDALE AFB, LA

RUEPJS/DIAXX

RUWBKNA/15TH AF MARCH AFB RIVERSIDE CALIF

INFO RUEPIA/CIA WASHDC

BT

SECRET CITE NPIC1506

SUBJECT: EVALUATION OF MISSION GL-972

1. CAMERA SYSTEM 111B, UNIT 3 WAS USED ON MISSION G-972 FLOWN 8 AUGUST 1967. PROCESSING WAS ACCOMPLISHED BY NAV RECON TECH SUPPCEN.

## 2. ORIGINAL NEGATIVE:

A. DENSITY VARIATIONS ARE NOTED AND ASSOCIATED WITH CHANGES IN VEHICLE GROUND TRACK AZIMUTH AND SOLAR ELEVATIONS. AN EXPOSURE CHANGE AT FRAME 972 COMPENSATES FOR THE HIGHER SOLAR ELEVATION AND THE EXPOSURE IS CONSIDERED NEAR OPTIMUM THROUGHOUT THE MISSION.

B. A POST PROCESSING CREASE IS PRESENT ALONG THE UNTITLED EDGE OF FRAMES 646 TO 653. THE CAUSE IS UNKNOWN AND DAMAGE IS MINIMAL. THE DAMAGE OCCURRED AFTER THE REPRODUCTIONS WERE MADE.

C. FAINT MINUS DENSITY STREAKS, CAUSED BY FOREIGN MATTER IN THE SLIT APERTURE, ARE NOTED ACROSS EACH FORMAT CAUSING MINIMAL IMAGE DEGRADATION.

D. A WAVERING PLUS DENSITY LINE IS PRESENT ON FRAMES 1515 TO 1614. IT RUNS ALONG THE MAJOR AXIS OF THE FILM BUT CANNOT BE DETECTED BETWEEN FORMATS. THE CAUSE IS UNKNOWN AND IMAGE DEGRADATION IS MINOR.

E. THE SHUTTER FAILED TO OPEN ON FRAME 742. THIS FRAME IS THE LAST OF A CAMERA OPERATION.

F. MODE FIVE WAS USED THROUGHOUT THE MISSION.

G. THE RESOLUTION VARIES WITH CHANGES IN OBLIQUITY. POOR TO FAIR RESOLUTION AND DOUBLE IMAGERY IS NOTED IN ALL PHOTOGRAPHY ACQUIRED AT OBLIQUITY ANGLES BETWEEN 38 AND 52 DEGREES. IMAGE SMEAR IS PRESENT IN FRAMES WHERE THE AIMING ANGLE WAS CHANGED WHILE THE CAMERA WAS OPERATING. GENERALLY, HOWEVER, THE RESOLUTION IS GOOD WITH THE VEST GROUND RESOLUTION ESTIMATED TO BE

ON VERTICAL FRAMES.

## 3. POSITIVES:

A. THE PI SUITABILITY IS GOOD. THE SCALE OF PHOTOGRAPHY PROVIDES DETAILED INFORMATION OF THE TARGETS ACQUIRED. IN ONE INSTANCE THE CAMERA WAS INITIATED PRIOR TO ENTERING INTO A TURN (CHECK POINT B) AND THE MAJORITY OF THESE ACQUISITIONS ARE SMEARED. ONE TARGET, BETWEEN CHECK POINTS B AND C, WAS NOT ACQUIRED BECAUSE THE CAMERA WAS TURNED OFF TOO SOON. PHOTOGRAPHY OF AN UNSCHEDULED AREA WAS ACQUIRED BETWEEN POINTS K AND L. ALL OTHER TARGETS WERE ADEQUATELY COVERED. THE OBLIQUE PHOTOGRAPHY ACQUIRED AT THE CRITICAL ANGLES OF OBLIQUITY (38-52 DEGREES) ARE DEGRADED AND CONTAIN SOME DOUBLE IMAGERY.

B. THE PRINTING AND PROCESSING ARE GOOD. THE DENSITY AND CONTRAST ARE NEAR OPTIMUM. IT IS REQUESTED THAT THE TIME, VOLTAGE, AND OBLIQUITY INFORMATION ON THE LAST FRAME OF A ROLL BE WRITTEN ON THE LEADER (IDENT) OF THE FOLLOWING ROLL ADJACENT TO THE FIRST FRAME OF THAT ROLL.

C. CLOUDS OBSCURED LESS THAN 10 PERCENT OF THE IMAGERY.

4. REMARKS FOR THE VARIOUS CAMERA OPERATIONS: Z TIME ON/OFF; FRAME NUMBERS; OBLIQUITY/SHUTTER SPEED; RESOLUTION; REMARKS.

A. 1154/1156; 001/083; VERTICAL/3.75, POOR TO FAIR; LOW

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SOLAR ELEVATION DOES NOT ILLUMINATE SHADOW AREAS.

B. 1209/1215; 084/400; VERTICAL/3.75; POOR TO FAIR; VEHICLE MANEUVERING INDUCES SMEAR.

C. 1227/1228; 401/451; VERTICAL/3.75; FAIR; SOLAR AZIMUTH ENHANCES PHOTOGRAPHY.

D. 1241/1243; 452/558; 45 DEGREES RIGHT/3.7; POOR; DOUBLE IMAGERY DEGRADES PHOTOGRAPHY.

E. 1255/1256; 559/624; 45 DEGREES RIGHT/3.7; POOR; DOUBLE IMAGERY DEGRADES PHOTOGRAPHY.

F. 1309/1311; 625/742; VERTICAL/3.7; FAIR TO GOOD.

G. 1315/1319; 743/971; VERTICAL/3.7; FAIR TO GOOD.

H. 1333/1336; 972/1057; VERTICAL/5.7; FAIR TO GOOD.

I. 1352/1357; 1058/1341; VERTICAL/5.7; FAIR TO GOOD. 40 PERCENT CLOUDS AND ISOLATED SMEARED IMAGERY.

J. 1415/1419; 1341/1629; VERTICAL/5.7; FAIR TO GOOD. FRAMES 1564/1629 ARE WATER.

GP-1

S E C R E T

END OF MESSAGE